

1. (AMENDED) An agent for promoting prolactin secretion which comprises an isolated ligand polypeptide, or a salt thereof, said ligand polypeptide having

- (i) an amino acid sequence of SEQ ID NO:73,
- (ii) an amino acid sequence wherein 1 to 15 contiguous amino acid residues are deleted from the amino acid sequence of SEQ ID NO: 73,
- (iii) an amino acid sequence wherein 1 to 80 contiguous amino acid residues are added to the amino acid sequence of SEQ ID NO: 73,
- (iv) an amino acid sequence wherein 1 to 15 amino acid residues are conservatively substituted with other amino acid residues in the amino acid sequence of SEQ ID NO: 73.

2. (AMENDED) An agent according to claim 1, wherein the ligand polypeptide is a polypeptide having an amino acid sequence that is:

- (i) the amino acid sequence of SEQ ID NO:74;
- (ii) the amino acid sequence of SEQ ID NO:74 fused to the N-terminal of the amino acid sequence of SEQ ID NO:73;
- (iii) the amino acid sequence corresponding to amino acid residues 2 to 21 of SEQ ID NO:73;
- (iv) the amino acid sequence corresponding to amino acid residues 3 to 21 of SEQ ID NO:73;
- (v) the amino acid sequence corresponding to amino acid residues 4 to 21 of SEQ ID NO:73;
- (vi) the amino acid sequence corresponding to amino acid residues 5 to 21 of SEQ ID NO:73;
- (vii) the amino acid sequence corresponding to amino acid residues 6 to 21 of SEQ ID NO:73;
- (viii) the amino acid sequence corresponding to amino acid residues 7 to 21 of SEQ ID NO:73;
- (ix) the amino acid sequence corresponding to amino acid residues 8 to 21 of SEQ ID NO:73;
- (x) the amino acid sequence corresponding to amino acid residues 9 to 21 of SEQ ID NO:73;
- (xi) the amino acid sequence corresponding to amino acid residues 10 to 21 of SEQ ID NO:73;
- (xii) the amino acid sequence corresponding to amino acid residues 11 to 21 of SEQ ID NO:73;
- (xiii) the amino acid sequence corresponding to amino acid residues 12 to 21 of SEQ ID NO:73;
- (xiv) the amino acid sequence corresponding to amino acid residues 13 to 21 of SEQ ID NO:73;
- (xv) the amino acid sequence corresponding to amino acid residues 14 to 21 of SEQ ID NO:73; and
- (xvi) the amino acid sequence corresponding to amino acid residues 15 to 21 of SEQ ID NO:73.

3. (AMENDED) An agent according to claim 2, wherein the polypeptide has an amino acid sequence of SEQ ID NO: 5, SEQ ID NO: 8, SEQ ID NO: 47, SEQ ID NO: 50, SEQ ID NO: 61 or SEQ ID NO:

64.

4. (AMENDED) A method for promoting prolactin secretion in a mammal in need thereof, comprising administering an effective amount of an agent according to claim 1 to said mammal.

C3 6. (AMENDED) A method for treating hypoovarianism in a mammal in need thereof, comprising administering an effective amount of an agent according to claim 1 to said mammal.

C4 10. (AMENDED) A method for promoting lactation of a mammal in need thereof, comprising administering an effective amount of an agent according to claim 1 to said mammal.

11. (AMENDED) A method for eliciting an aphrodisiac effect in a mammal in need thereof, comprising administering an effective amount of an agent according to claim 1 to said mammal.

C5 13. (AMENDED) A method for making a pharmaceutical for promoting prolactin secretion, said method comprising combining an agent according to claim 1 with a pharmaceutically acceptable carrier, excipient or diluent.

14. (AMENDED) A method for promoting prolactin secretion in a mammal in need thereof, which comprises administering to said mammal an agent according to claim 1 in an amount effective to promote prolactin secretion in said mammal.

C6 17. (NEW) A method for promoting lactation in a mammal in need thereof, which comprises administering to said mammal an agent according to claim 2 in an amount effective to promote lactation in said mammal.

18. (NEW) A method for treating hypoovarianism in a mammal in need thereof, comprising administering an effective amount of an agent according to claim 2 to said mammal.

19. (NEW) A method for eliciting an aphrodisiac effect in a mammal in need thereof, comprising administering an effective amount of an agent according to claim 2 to said mammal.

A mark-up of the changes made in the claims is shown below.

1. (AMENDED) An agent for promoting~~[modulating]~~ prolactin secretion which comprises an isolated ligand polypeptide, or a salt thereof, [~~for a G protein-coupled receptor protein~~] said ligand polypeptide having
 - (i) an amino acid sequence of SEQ ID NO:73,
 - (ii) an amino acid sequence wherein 1 to 15 contiguous amino acid residues are deleted from the amino acid sequence of SEQ ID NO: 73,
 - (iii) an amino acid sequence wherein 1 to 80 contiguous amino acid residues are added to the amino acid sequence of SEQ ID NO: 73,
 - (iv) an amino acid sequence wherein 1 to 15 amino acid residues are conservatively substituted with other amino acid residues in the amino acid sequence of SEQ ID NO: 73.

2. (AMENDED) An agent [~~as claimed in~~] according to claim 1, wherein the ligand polypeptide is a polypeptide [~~comprising~~] having an amino acid sequence that is: [~~SEQ ID NO: 73 or a substantial equivalent thereto, or~~]
 - (i) the amino acid sequence of SEQ ID NO:74;
 - (ii) the amino acid sequence of SEQ ID NO:74 fused to the N-terminal of the amino acid sequence of SEQ ID NO:73;
 - (iii) the amino acid sequence corresponding to amino acid residues 2 to 21 of SEQ ID NO:73;
 - (iv) the amino acid sequence corresponding to amino acid residues 3 to 21 of SEQ ID NO:73;
 - (v) the amino acid sequence corresponding to amino acid residues 4 to 21 of SEQ ID NO:73;
 - (vi) the amino acid sequence corresponding to amino acid residues 5 to 21 of SEQ ID NO:73;
 - (vii) the amino acid sequence corresponding to amino acid residues 6 to 21 of SEQ ID NO:73;
 - (viii) the amino acid sequence corresponding to amino acid residues 7 to 21 of SEQ ID NO:73;
 - (ix) the amino acid sequence corresponding to amino acid residues 8 to 21 of SEQ ID NO:73;
 - (x) the amino acid sequence corresponding to amino acid residues 9 to 21 of SEQ ID NO:73;
 - (xi) the amino acid sequence corresponding to amino acid residues 10 to 21 of SEQ ID NO:73;
 - (xii) the amino acid sequence corresponding to amino acid residues 11 to 21 of SEQ ID NO:73;
 - (xiii) the amino acid sequence corresponding to amino acid residues 12 to 21 of SEQ ID NO:73;
 - (xiv) the amino acid sequence corresponding to amino acid residues 13 to 21 of SEQ ID NO:73;

- (xv) the amino acid sequence corresponding to amino acid residues 14 to 21 of SEQ ID NO:73; and
(xvi) the amino acid sequence corresponding to amino acid residues 15 to 21 of SEQ ID NO:73.

3. (AMENDED) An agent ~~[as claimed in]~~ according to claim 2, wherein the polypeptide ~~[comprising]~~ has an amino acid sequence ~~[represented by SEQ ID NO: 73 is a polypeptide comprising an amino acid sequence represented by]~~ of SEQ ID NO: 5, SEQ ID NO: 8, SEQ ID NO: 47, SEQ ID NO: 50, SEQ ID NO: 61 or SEQ ID NO: 64.

4. (AMENDED) ~~[An agent as claimed in claim 1, which is]~~ A method for promoting prolactin secretion in a mammal in need thereof, comprising administering an effective amount of an agent according to claim 1 to said mammal.

5. (CANCELLED) ~~An agent as claimed in claim 1, which is for inhibiting prolactin secretion.~~

6. (AMENDED) ~~[An agent as claimed in claim 4, which is]~~ A method for treating ~~[or preventing]~~ hypoovarianism[, geneeyst eacogenesis, menopausal syndrome, euthyroid or hypometabolism] in a mammal in need thereof, comprising administering an effective amount of an agent according to claim 1 to said mammal.

7. (CANCELLED) ~~An agent as claimed in claim 5, which is for treating or preventing pituitary adenomatosis, brain tumor, emmeniopathy, autoimmune disease, prolactinoma, infertility, impotence, amenorrhea, galactorrhea, acromegaly, Chiari Frommel syndrome, Argonz del Castilo syndrome, Forbes Albright syndrome, lymphoma, Sheehan syndrome or dyszoospermia.~~

8. (CANCELLED) ~~An agent for modulating placental function, which comprises a ligand polypeptide, or a salt thereof, for a G protein coupled receptor protein.~~

9. (CANCELLED) ~~An agent as claimed in claim 8, which is for treating or preventing choriocarcinoma, hydatid mole, irruption mole, abortion, unthrifty fetus, abnormal saccharometabolism, abnormal lipidmetabolism or oxytocia.~~

10. (AMENDED) ~~[An agent as claimed in claim 4, which is]~~ A method for promoting lactation of ~~[domestic]~~ a mammal in need thereof, comprising administering an effective amount of an agent according to claim 1 to said mammal.

11. (AMENDED) ~~[An agent as described in claim 4, which is for]~~ A method for eliciting an aphrodisiac effect in a mammal in need thereof, comprising administering an effective amount of an agent according to claim 1 to said mammal.

12. ~~(CANCELLED) An agent for diagnosing function of prolactin secretion, which comprises a ligand polypeptide, or a salt thereof, for a G protein coupled receptor protein.~~

13. (AMENDED) ~~[Use of a ligand polypeptide, or a salt thereof, for a G protein coupled receptor protein for manufacture of a medicament for modulating]~~ A method for making a pharmaceutical for promoting prolactin secretion, said method comprising combining an agent according to claim 1 with a pharmaceutically acceptable carrier, excipient or diluent.

14. (AMENDED) A method for ~~[modulating]~~promoting prolactin secretion in a mammal in need thereof, which comprises administering to said mammal ~~[a ligand polypeptide, or a salt thereof, for a G protein coupled receptor protein]~~ an agent according to claim 1 in an amount effective to promote prolactin secretion in said mammal.

15. ~~(CANCELLED) Use of a ligand polypeptide, or a salt thereof, for a G protein coupled receptor protein for manufacture of a medicament for modulating placental function.~~

16. ~~(CANCELLED) A method for modulating placental function in a mammal, which comprises administering to said mammal a ligand polypeptide, or a salt thereof, for a G protein coupled receptor protein.~~

17. (NEW) A method for promoting lactation in a mammal in need thereof, which comprises administering to said mammal an agent according to claim 2 in an amount effective to promote lactation in said mammal.

18. (NEW) A method for treating hypoovarianism in a mammal in need thereof, comprising administering an effective amount of an agent according to claim 2 to said mammal.

19. (NEW) A method for eliciting an aphrodisiac effect in a mammal in need thereof, comprising administering an effective amount of an agent according to claim 2 to said mammal.